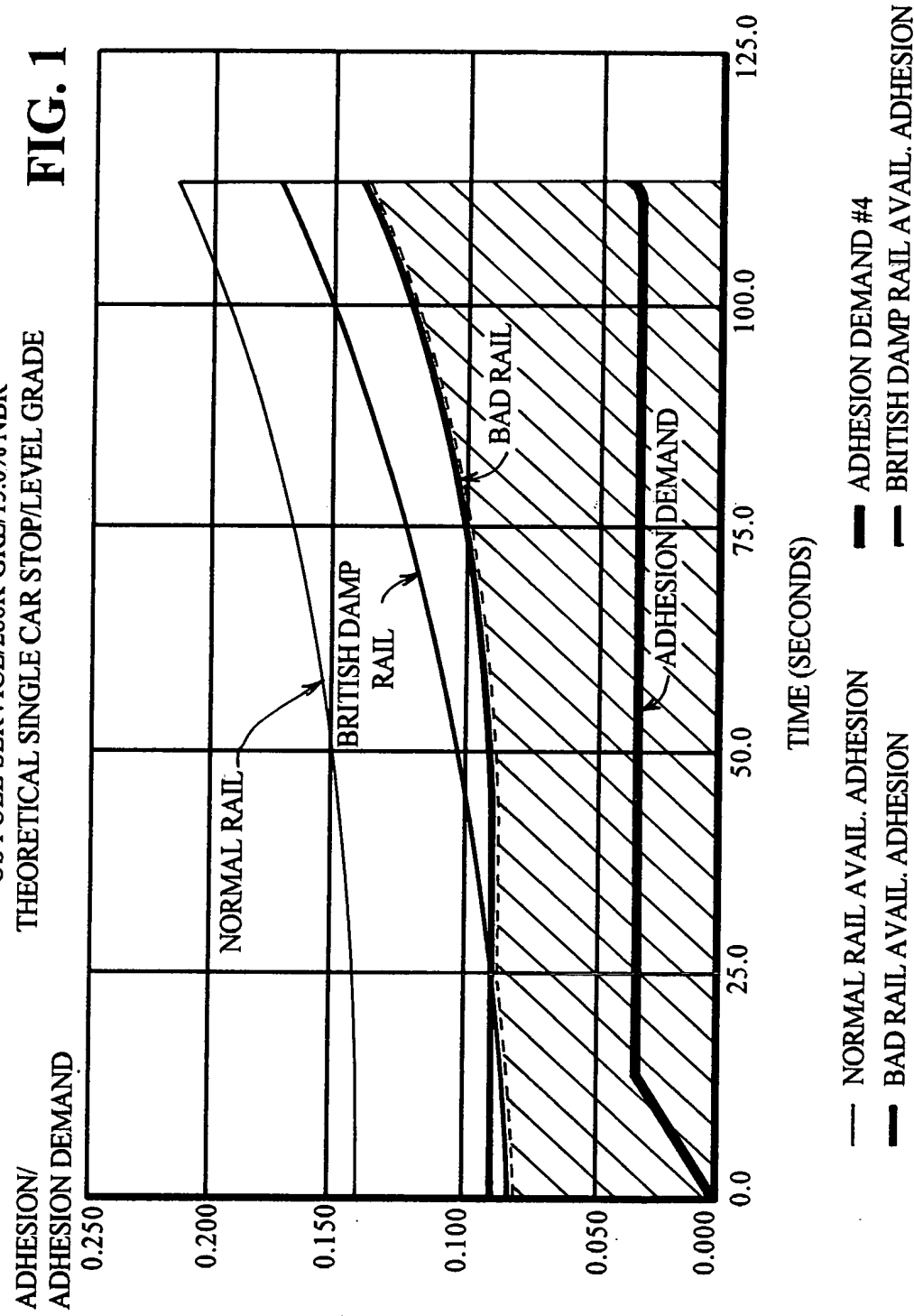


US FULL SERVICE/286K GRL/13.0% NBR
THEORETICAL SINGLE CAR STOP/LEVEL GRADE

FIG. 1



US FULL SERVICE/52,260 LT. WT./38.0% NBR
THEORETICAL SINGLE CAR STOP/LEVEL GRADE

FIG. 2

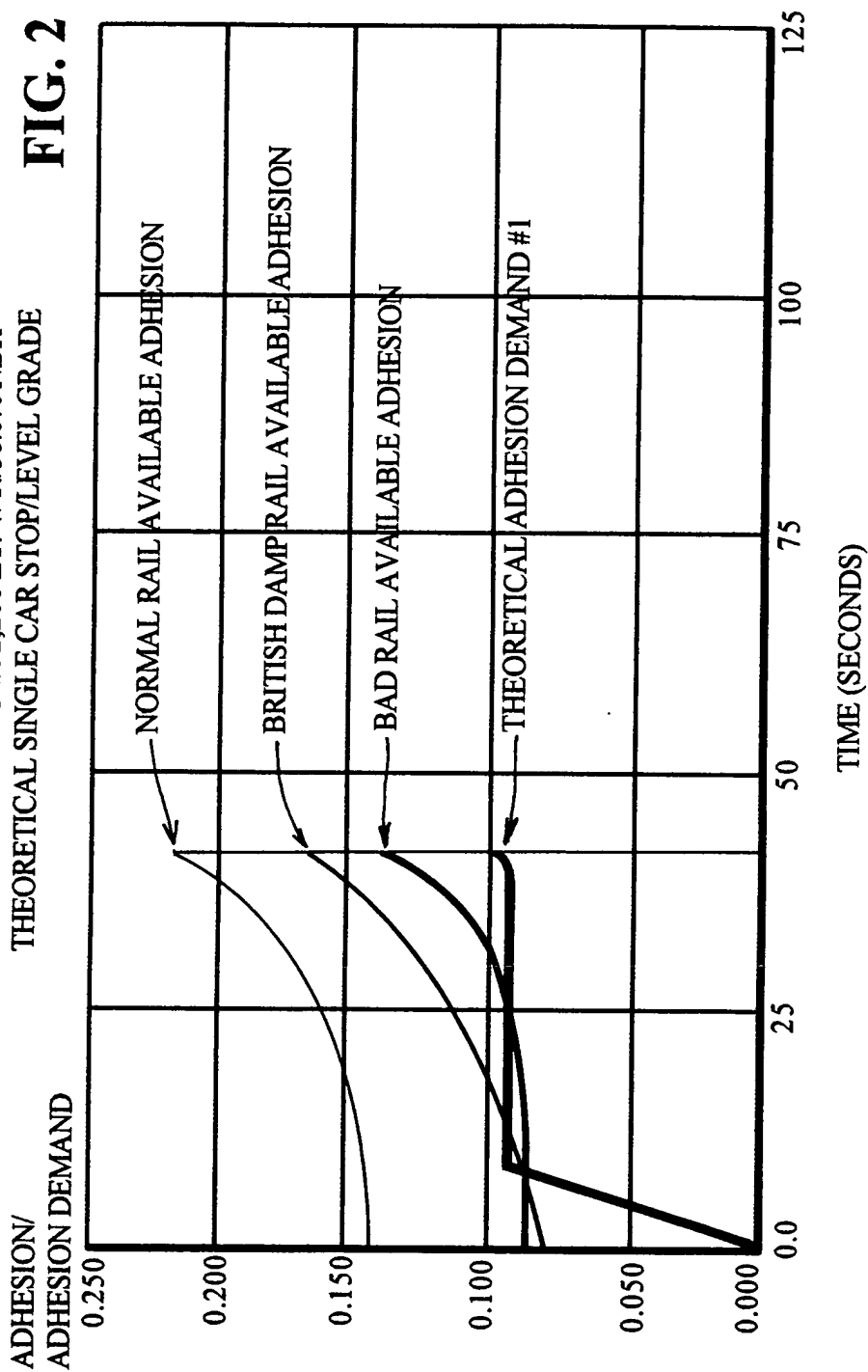


CHART #7- UK 102 METRIC TON/225K GRL 28.6% NBR
ADHESION/ THEORETICAL SINGLE CAR STOP/LEVEL GRADE
ADHESION DEMAND

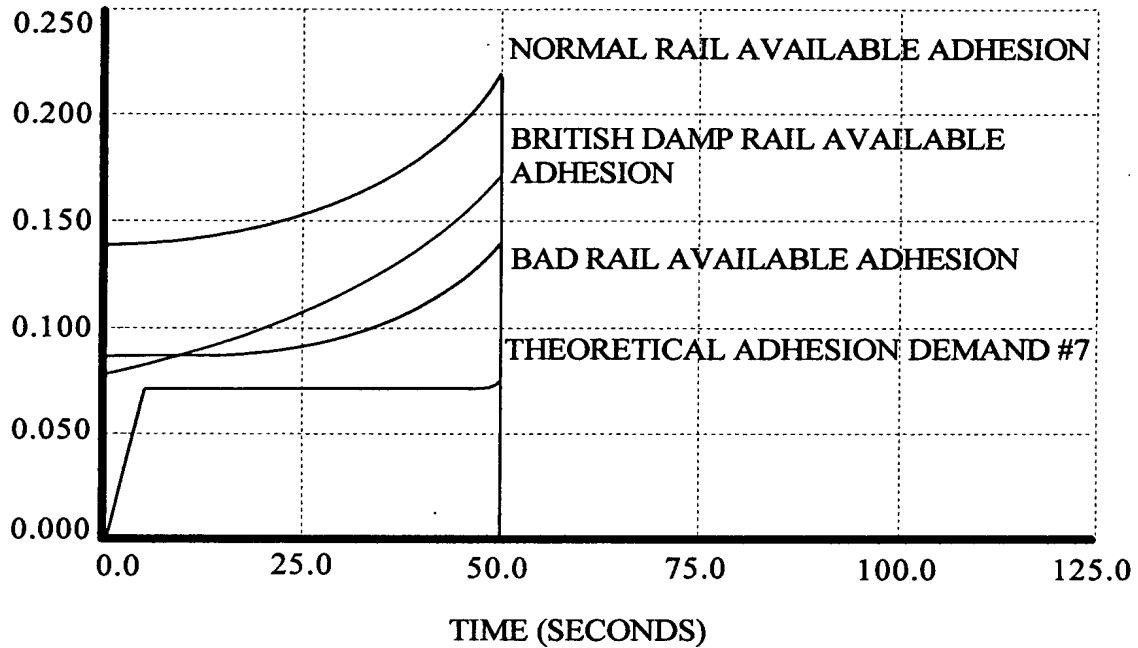


CHART #8 - SINGLE CAR STOP DISTANCES

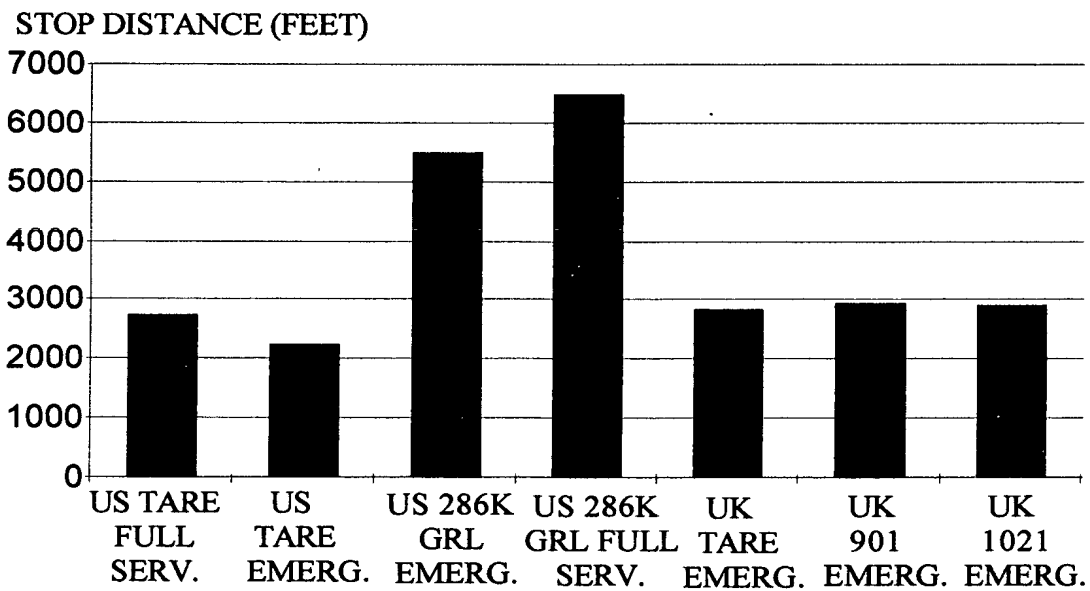


CHART #1- US FULL SERV./52,260 LT. WT./38.0% NBR
THEORETICAL SINGLE CAR STOP/LEVEL GRADE

ADHESION/
ADHESION DEMAND

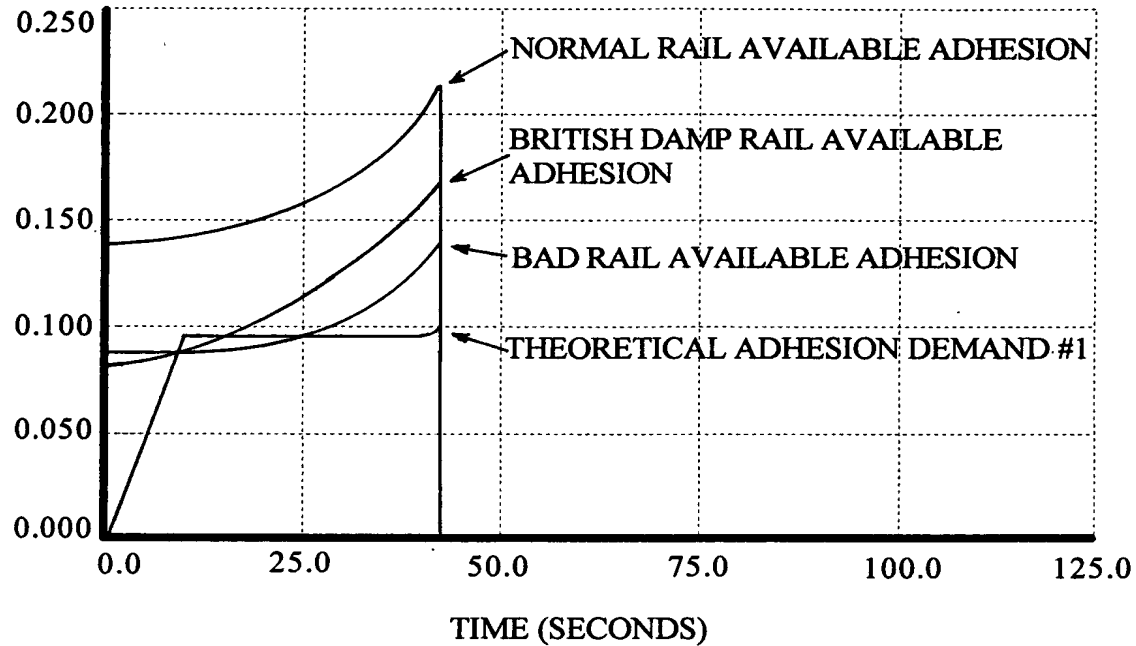


CHART #2 - US EMERGENCY/52,260 LT. WT./45.6% NBR
THEORETICAL SINGLE CAR STOP/LEVEL GRADE

ADHESION/
ADHESION DEMAND

